REA BOOKKEEPING COURSE

Text No. 21
(Revised 6/1/47)

Repayment of Obligations to REA

UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration
Finance Division
Washington 25, D.C.

REPAYMENT OF OBLIGATIONS TO REA

PROCEDURE PRIOR TO SEPT. 21, 1944

Text No. 21
(Revised 6/1/47)

1. INTRODUCTION

The purpose of this text is to give a simplified description of the procedure followed by REA in computing, recording, billing, and accounting for the principal owed the Government by the cooperative borrowers, and the interest thereon.

2. DEFINITIONS

For the sake of clarity the following definitions are presented:

Advance

The amount sent to a cooperative under authority of, and for the purposes outlined in, the loan contract and approved requisition.

Interest

Begins on the day following issuance of U. S. Treasury check by disbursing officer (date can be obtained by cooperative from date on check) and includes the last day of the billing period.

Amortization Repayment Rates

For construction loans are based on an amount per $1,000 while wiring and plumbing installation loans are based on an amount per $100.

Advance Payment

An amount of money received from a cooperative (from revenue sources) to be applied toward reduction of their loan balance at a time prior to the date repayment is due and payable. Such payments are referred to as "cushion of credit" payments.

Repayment

An amount due and paid by the cooperative for application toward reduction of accumulated interest and the loan balance.

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Refund

An amount of money, which was originally part of an advance, returned by a cooperative to the REA and which sum the cooperative has determined as not being required (at the time of refund) for the purpose for which the money was requisitioned. The difference between a refund and either an advance payment or repayment is that the money returned by the cooperative has never been expended by the cooperative for the purpose for which advanced and thus, when returned to REA, is directly reimbursable to the appropriation from which granted and can, therefore, be again requisitioned by the cooperative and again advanced by REA. In cases where a cooperative sells material originally purchased out of funds advanced by REA and such material was never a part of the cooperative, then the proceeds of the sale can be considered as a refund.

Accumulated Interest

Most mortgage notes given by the cooperatives provide for a period of time (usually 30 months) wherein the interest on the money advanced by the Government is billed to the cooperatives but is not payable and thus accumulates during this period. At the close of the accumulative period, for all future interest computations, the amount of interest accumulated is added to the principal, and interest is billed on this amount at the rate specified by the contract.

Current Interest

The amount of interest billed and payable on a definite specified date. In the case of construction notes, the amount of interest due and payable monthly after the 30th month and which is computed on the basis of the unpaid loan balance plus the unpaid accumulated interest balance. In the case of installation notes, the interest due and payable on the unpaid loan balance as computed in accordance with the provisions of the installation notes.

Application Of Amortization Remittance

Each such payment shall be applied, first to the payment of current interest, on the accumulated interest, if any, and on the principal; second to the payment on account of the accumulated interest until the accumulated interest shall be fully repaid; third to the payment on account of the principal. In other words, current interest accruing on the deferred accumulated interest and principal is paid first. Any balance is applied to wipe out the deferred accumulated interest. When this is

accomplished, the balance remaining after payment of current interest, described above, is applied to the payment on account of principal.

Forwarding of Payments by Cooperatives

All checks sent to RFC by cooperatives as payments on interest and/or principal should be sent sufficiently in advance of the due date to enable the check to pass through the clearing house and the cooperative's local bank prior to the due date. (Mailing time plus four or five days usually required.)

Interest Which is Accumulating

(Accumulated interest) is computed on the loan balance for the actual number of days in the period. Interest computed for the actual number of days is on a 365-day basis, or 366 days in leap year. (Period covered--30 months from date of note.)

Current Interest

Payable in cash from the 31st through the 48th month from date of note is computed on the net advances less prepayments, plus unpaid accumulated interest for the actual number of days in the period.

3. FORMULAE

a. Special Construction Obligation

I Accumulated Interest With Constant Loan Balance

Accumulated interest for period March 1 to April 1

Loan balance $100,000

Interest rate 2.73% (2% since September, 1944)

$$100{,}000 \times \frac{31}{365} \times .0273 = 231.86$$

II Current Interest Payable With Constant Loan Balance And Accumulated Interest Balance

Current interest for March 1 to April 1

Loan balance $100,000

Accumulated interest balance $5,000

Interest rate 2.73% (now 2%)

$$(100{,}000 + 5{,}000) \times \frac{31}{365} \times .0273 = 243.46$$

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III Current Interest With Advance Made During The Period

Current interest for period March 1 to April 1

Loan balance $100,000 as of March 1

Accumulated interest balance $5,000

Advance made to cooperative on March 20 for $10,000

Interest rate 2.73% (now 2%)

$(100{,}000 + 5{,}000) \times \frac{31}{365} \times .0273 = 243.46$

$10{,}000 \times \frac{12}{365} \times .0273 = 8.98$

$243.46 + 8.98 = 252.44$

In the event a repayment instead of an advance of $10,000 has been made by the cooperative the computations would have been the same as above, but credit would be given for 12 days rather than a charge.

IV Current interest for period March 1 to April 1

Loan balance $100,000

Accumulated interest $5,000

Amortization payment of $3.00 per thousand due April 1

Interest rate 2.73%

(*100,000 + 5,000) x 3.00 = 315.00 monthly payment

• (100,000 + 5,000) x 1/12 x .0273 = current interest 238.88

315.00 - 238.88 = 76.12 amount to be applied to accumulated interest

*When advance payments have been made before the amortization payment schedule is computed, i.e., the basis date at the close of the 48th month, these advance payments will be carried forward as "cushion of credit" payments and are not considered in the data used for computing the amortization payment unless special arrangements have been made and approved by and between the cooperative and REA. In other words,

the amount of money advanced to the cooperative plus the unpaid accumulated interest is amortized. The exception is that of the proceeds from sales of material being returned to REA as a reduction of the long-term debt. These amounts are considered principal due and should not be amortized. Refunds made prior to amortization are not amortized.

V Current Interest When Note is Being Amortized, And Advance Payment Was Made During The Period And The Previous Payment Was Late

Current interest for period March 1 to April 1

Loan balance \$100,000

Accumulated interest balance \$4,923.88

Amortization payment \$315

Interest rate 2.73% (now 2%)

Advance payment of \$10,000 made on March 16

Remittance for accumulated interest of \$76.12 due March 1 and credited March 8.

(100,000 + 4,923.88) x 1/12 x .0273 = 238.70

10,000 x [16/31 of (1/12 x .0273)] = 11.74

76.12 x [7/31 of (1/12 x .0273)] = .04

238.70 − 11.74 + .04 = 227.00 current interest for period

315.00 + .04 = 315.04 current payment due

315.04 − 227.00 = 88.04 amount applicable to accumulated interest

All remittances are posted to and including the tenth day following the due date. However, if the previous billing is not paid when the subsequent statement is computed, an additional charge is made on the accumulated interest or principal amount delinquent at the 1/12 rate.

Credit is then given on the subsequent statement, provided the payment is received during the period for which the additional charge was made. If the delinquent amount is principal, to compute the subsequent statement it is deducted from the loan balance to determine the theoretical balance. The current interest for the period is then computed upon the theoretical balance.

b. Wiring and Plumbing Obligation

I Current Interest On Installation Loans

Current interest on installation loan March 1 to September 1

Note for $300

Amortization rate $10.77 per $100

Interest rate 2.73% (now 2%)

300 x 10.77 = 32.31 amortization payment

300 x .0273 x 1/2 = 4.10 current interest

32.31 — 4.10 = 28.21 amount to be applied to principal

II Current Interest On Installation Loans When Consumer Collateral Has Been Reacquired During The Period And The Payment Of Previous Billing Was Credited After Due Date

Current interest on installation loan March 1 to September 1

Note for $1,000 dated March 1

Amortization rate $10.77 per $100

Interest rate 2.73% (now 2%)

Since billing periods are on a six-months' basis, this will comprise the first billing period. The voucher was paid and advance made on April 2. Consumer collateral amounting to $100 reacquired on August 15.

$900 \times 10.77 = 96.93$ amortization payment

$1{,}000 \times \frac{152}{184} \times \frac{.0273}{2} = 11.28$

$100 \times \frac{17}{184} \times \frac{.0273}{2} = .13$ credit

$96.93 - 11.28 + .13 = 85.78$ amount applied as principal repayment.

When payment of installation loans is received after the due date additional interest is charged on the principal billing from the due date to the date payment is credited. The actual number of days is used in most cases. If the payment is not made by the next billing date the 1/2 rate is used. In that case the principal due is deducted from the loan balance to determine the theoretical balance. Current interest for the period is computed on this theoretical balance and interest computed as described above on the delinquent principal is in addition to the current interest. Amortization payments are computed on the amount of money advanced, except when consumer collateral is reacquired or refunds made <u>before the first payment is due</u>. The <u>loan balance</u> is then amortized.

c. <u>Bonds</u>

Interest on bonds is usually due semi-annually. The 1/2 rate is used whether interest only is due; or bonds are being retired. If interest is due monthly on bonds, the 1/12 rate is used.

4. EXPLANATION OF BILLING STATEMENT OF PRINCIPAL AND/OR INTEREST PAYABLE

As has been pointed out under the definition of "Accumulated Interest," most notes provide for a period of time, usually 30 months, wherein the interest on the money advanced by the Government is billed to the cooperative but is not payable, and thus accumulates. Between the 30th and 48th months only the current interest which accumulates each month is payable, while after the 48th month an amount per thousand dollars is charged which pays off the previously accumulated interest and the principal.

Each month the Finance Division of the REA bills each cooperative for the amount due. A sample of this billing statement is submitted for study in connection with the following explanations:

<u>Column 1</u>

This refers to the posting date, i.e., the date the statement is prepared by the Finance Division.

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Column 2

Statements are numbered consecutively. Thereafter all reference to a particular statement will identify it by number. The number in this column must agree with that in column 15.

Column 3

This is a blank column made necessary by the spacing of our loan ledger sheet.

Column 4

The amount in this column, if any, represents the amount of principal previously billed but not paid. The one exception is "cushion of credit" or advance payments which will be fully explained later.

Column 5

This figure, if any, indicates the interest previously billed and, as yet, unpaid. However, if interest is slightly overpaid, the amount may represent a credit or "red" figure. This may be easily ascertained. If the amount of column 14 is less than the amount of columns 8 and 10, then the amount in column 5 is a credit.

General

In order that all statements may be computed and mailed 15 days in advance of the due date remittances received to and including the tenth day after the due date are posted. If the amount of any previous billings appears in columns 4 and 5 that have been previously paid by the system, such amounts should be disregarded. To illustrate, if a billing is due the first of the month, all remittances to the tenth day of the month are posted. Statements covering billings due the first are computed, posted, and mailed from the eleventh to the fifteenth. If a remittance, due the first, is received for credit prior to the close of business on the tenth, such payment should be reflected in the current billing. However, if such remittance is received on the eleventh, it will not be reflected in the statement of billing due the first and the amount of the previous billing will appear in columns 4 and 5. In the first instance, interest is charged on the amount of the principal or accumulated interest billing for the number of days payment is delinquent. In the second instance, credit will be given for the number of days in the period <u>less</u> ten as interest has already been charged for the entire period.

Column 6

This amount represents the unpaid <u>principal</u> amount, after billing, of the loan with REA.

Column 7

As in column 3 this is a blank column to obtain proper spacing.

Column 8

From the 49th month until the accumulated interest previously deferred is paid in full, the amount of amortization payment over and above the current interest is applied to the accumulated interest. The amount thus obtained is placed in this column.

Column 9

This amount represents the unbilled portion of the deferred accumulated interest. The amount entered in column 8 is automatically subtracted from the balance in column 9. Thus the accumulated interest balance, at all times, represents the net unbilled amount of accumulated interest.

Even though the accumulated interest billed is not paid the accumulated interest balance is automatically reduced with an offsetting increase in the interest due column (14). (See explanation of column 14.)

Note

After deduction of column 8, this column should be in agreement with the general ledger a/c 213.3 for each note.

Column 10

In this column is posted all current interest on the loan balance, accumulated interest balance, and additional interest due on previously billed but unpaid principal or accumulated interest for the period covered by the statement.

Column 11

All principal maturing on the date of the statement in accordance with the terms of the note is entered here. (Also see explanation concerning handling of "cushion of credit.")

Column 12

The total amount of columns 13 and 14 must be reported available for credit by the RFC by the date indicated in this column. Interest is computed to and including this date. (Regarding principal, see column 13.)

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Column 13

The amount of column 4, if any, plus the amount of column 11, if any, is reported in this column. Unless a "cushion of credit" is available and it is desired that the cushion of credit be applied on the principal billing, this amount must be paid by the date indicated, as explained under column 12.

Column 14

The amount of column 5, if any, plus the amount of column 8, if any, plus the amount of column 10 is reported in this column. The amount shown in this column must be paid by the date indicated.

Item 15

All statements of the same type are numbered consecutively. This number is used for reference purposes. Any correspondence relating to the billing statement should refer to this number.

Item 16

The note designation, name, and address of the cooperative being billed is entered here. Any variation from cooperative records should be promptly reported to the Finance Division.

Item 17

Checks should be prepared and mailed in accordance with the instructions contained in the block.

Items 18 and 19

Only the amounts indicated by the arrows should be paid. This is particularly important in the case of previous overpayments or "cushion of credit" payments.

Attention is directed toward sending in all remittances (including advance payments) in sufficient time to have credit given on the accounts on or before the due date.

5. EXPLANATION OF BILLING STATEMENT WHEN CUSHION OF CREDIT PAYMENT IS MADE

Cushion of credit payments affect columns 4, 11, 13, and item 18 as explained below.

Column 4

The total amount of the cushion of credit payment will be entered here. This is a credit or "red" figure; however, as billing and

posting are done simultaneously and some copies are carbons, caution should be used in interpreting this column. While the heading of the block is not applicable, due to the mechanics of our billing machine, it is necessary to use this column.

Column 11

In order to maintain the cushion of credit it is necessary to pay the amount of this column plus that of column 14. The amount of column 13 should not be paid as it represents the balance of the cushion of credit after the current month's principal payment has automatically been deducted. After payment is received this amount is built up to its original size.

Column 13

As explained under column 11 above this is not an amount due and payable but simply the net balance of the cushion of credit. The symbol "CR" follows this amount.

Item 18

To enable cooperatives, who so desire, to retain intact their cushion of credit we block out this arrow and insert another arrow which points to column 11. The inscription in the arrow states "To retain Cushion of Credit."

The chart on page 13 presents a bird's-eye view of the life of the average loan and its repayment stages.

By way of an explanation and to provide specific examples of the financial transactions necessary during each of the phases described in this chart, the following journal entries are presented:

Phase #1 Accumulated Deferred Interest

Loan balance $100,000

Interest rate 2.73% (now 2%)

For period March 1 to April 1

Accumulated deferred interest 231.86

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The journal entry to show the receipt of a statement during the construction period would be as follows:

Dr.	100.31	Construction Work in Progress--Contract	231.86	
Cr.	213.3	Interest Accrued-Deferred--REA Construction		231.86

To record the accrued interest, deferred on Section A for period March 1 to April 1.

In cases where some construction work is going on during the period of operation, the journal entries would be:

Dr.	530.1	Interest on REA Construction Loan	231.86	
Dr.	100.31 or 100.32	Construction Work in Progress Contract or Force Account	50.00	
Cr.	213.3	Interest Accrued-Deferred--REA Construction		231.86
Cr.	536	Interest Charged to Construction--Credit		50.00

To record accrued interest, deferred for the period May 1 to July 1, and to record portion of interest applicable to construction for the period.

Account 530.1 is charged with the full amount of the interest, and the credit to account 536 offsets account 530.1 by the portion chargeable to construction.

Where the period is completely operation, it would be necessary only to debit account 530.1 and credit account 213.1.

Phase #2 Current Interest

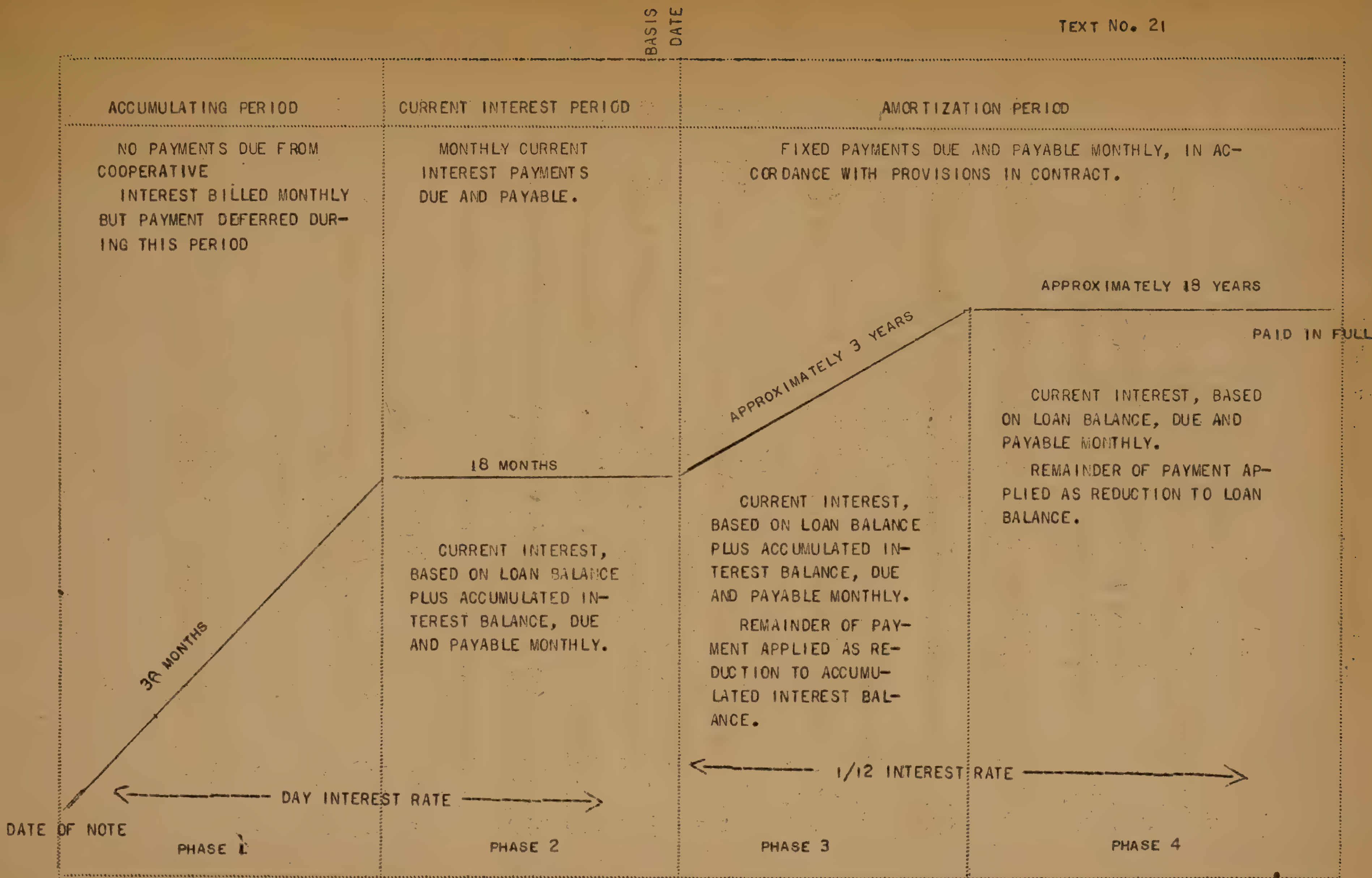
Almost invariably the construction of the line has been completed before this phase is entered.

Loan balance $100,000

Accumulated interest balance $5,000

For period March 1 to April 1

Interest rate 2.73% (now 2%)



REA CONSTRUCTION LOAN ACCOUNTING PROCEDURE

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$(100{,}000 + 5{,}000) \times \frac{31}{365} \times .0273 = 243.46$

This amount should be paid, producing the following entry:

Dr.	530.1	Interest on Long-Term Debt	243.46	
Cr.	120.1	Cash-General and Operating Funds		243.46

To record the payment of current interest on Section A for period March 1 to April 1.

Phase #3 Payment of Current Interest and Deferred Accumulated Interest

Loan balance $100,000

Accumulated interest $5,000

Amortization payment due $3.00 per thousand

For period March 1 to April 1

Interest rate 2.73% (now 2%)

$(100{,}000 + 5{,}000) \times 3.00 = 315.00$ monthly payment

$(100{,}000 + 5{,}000) \times 1/12 \times .0273 = 238.88$ current interest

$315 - 238.88 = 76.12$ amount to be applied to accumulated interest

The sum of $315.00 should be paid, affecting the following accounts:

Dr.	530.1	Interest on REA Construction Loan	238.88	
Dr.	213.3	Interest Accrued-Deferred--REA Construction	76.12	
Cr.	120.1	Cash--General [illegible]		315.00

To record the payment of interest and reduction of accrued interest on Section A for month of March 1 to April 1.

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Phase #4 Payment of Current Interest and Amortization of Note

This case would be handled similarly to Phase #3 with the exception that instead of charging Account 213.3 for the $76.12 the debit would be made against Account 213.11--Long-Term Debt--Construction Loan Contract.

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Changes Effective September 21, 1944

An amendment to the REA Act, commonly referred to as the Pace Act, approved September 21, 1944, changed the rate of interest on all REA notes to 2% per annum and permitted loans, within the discretion of the Administrator, to be made for 35 years instead of 25 years.

The Pace Act changed the interest rate on all unmatured and unpaid balances as of September 21, 1944, to 2%.

1. ADJUSTED BILLINGS UNDER PACE ACT

The intent of the Pace Act was to give the borrowers reduced payments. The note called for definite payments and a procedure whereby the payments would be applied: (1) to liquidate current interest; (2) to reduce or liquidate accumulated interest and (3) to reduce the principal loan balance. Thus to reduce the interest to 2% and maintain the payment as a constant would result in the loan being amortized in less than the maturity period specified in the note. To relieve this condition a procedure was adopted wherein we were instructed to reduce the payments provided in the note by the amount of the interest saving. This procedure provided a mechanism whereby the amounts applied toward reduction of accumulated interest and principal were the same as provided by the original provisions of the note and thus the maturity date would be identical with the original intent of the note so far as the life of the loan is concerned.

2. QUARTERLY BILLINGS

The procedure for effecting quarterly billings was entirely of an administrative policy nature and was designed as a time-saving factor. In putting the procedure into effect the first billing was made as an offer by the Government to change the note provisions and payment by the borrower completed on acceptance of this offer. It should be pointed out that since the new loans would be made on a quarterly basis the change over by the REA borrower to a quarterly basis on existing notes was designed also to eliminate confusion and possible misunderstanding.

3. REFUNDING OF NOTES

It is anticipated that as soon as the work load of the Washington office (particularly that of the Solicitor's Office) will permit the present outstanding notes of the borrowers will be refunded. The program calls for:

A. Extensions within the 35 year periods provided by the Pace Act.
B. Grouping of notes where the financial condition of the borrower will warrant such procedure. It should be pointed out that where notes are grouped the 35 year period must be considered from the date of the oldest note.

4. NO INTEREST ON ACCUMULATED INTEREST

The provision of not charging interest on the accumulated interest refers ONLY to notes executed after September 21, 1944. On notes executed prior to that date the charging of interest on accumulated interest still prevails.

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5. STRAIGHT LINE AMORTIZATION

On loans made after September 21, 1944, the loan will generally follow one of the two following schedules:

A. A loan for 35 years with a 5 year accumulated interest period; and straight line amortization over the remaining 30 years. This procedure must always be justified and is designed generally for new borrowers having no completed construction or where, in the requirements for self-liquidation, the financial condition of the borrower requires an extended period prior to amortization payments.

B. The second schedule and the one generally in use provides for a loan for 35 years with an accumulated interest period of two years and straight line amortization over the remaining 33 years.

Both of these schedules provide for quarterly payments and no interest on the accumulated interest. It should be noted that since the straight line amortization factor will retire the principal and interest thereon over the period the loan is being amortized it will not provide a procedure for the liquidation of the accumulated interest. Thus each new note in addition to providing for the amortization of the loan provides a procedure for the paying off of the accumulated interest in equal payments over the regular quarterly payment periods of amortization. Each new note, therefore, contains two repayment factors: (1) to repay the loan advances and current interest thereon, and (2) payment for liquidation of the accumulated interest. (The accumulated interest is liquidated by making equal quarterly payments over the remaining life of the note.)

6. EXISTING NOTES WHEN REFUNDED

It should be pointed out that in refunding the existing notes the procedure calls also for straight line amortization. The mechanics employed thus far in this regard have been to complete the current phase of the step rate amortization and then to amortize the remainder on the straight line method. As an example suppose a note being refunded is in the $4.00 monthly payment period and has nine payments remaining under this schedule. The $4.00 monthly payment is equivalent to $12.00 quarterly and the nine monthly payments to three quarterly payments. In this case the refunding note would provide for three quarterly payments at the $12.00 rate and the remaining quarterly payments would be computed on the straight line amortization procedure and thus set forth in the refunding note.

One might rightfully ask the question, "What are the benefits of extension notes to REA borrowers?" The answer is in four parts:

1. Since the mechanics of the present note have been materially disturbed by the Pace Act and recent policy determinations the refunding note will establish definite payout schedules

which should be of decided value to the borrower in simplifying understanding of the required payments and also in establishing a schedule of debt retirement which will be very beneficial in rate adjustments and future business potentials.

2. The work load of the borrowers should be slightly decreased in proportion to the notes which can be combined. Instead of worrying along with 10, 12 or some other large number of notes they can be decreased to 1 or some number in excess thereof dependent upon the financial condition of the borrower to meet the new payout requirements.

3. The extension of the time interval to 35 years will bring much needed lower periodic payments to many of the borrowers. In the case of cooperatives financially well fixed at the present time it will afford an excellent opportunity to increase their advance payments which are good insurance against future unforseen emergencies.

4. The extension of time and lower periodic payments should by all means serve as an excellent aid to area coverage and greatly expedite the taking of electric energy to those areas not now considered as feasible under present payout requirements.

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COMPUTATIONS FOR QUARTERLY BILLINGS

On unrefunded notes issued prior to September 21, 1944
(Pace Act effective date)

ACCUMULATED INTEREST: Interest is computed on the amount of advances for the actual number of days in the quarterly period.

A. ACCUMULATED INTEREST WITH CONSTANT LOAN BALANCE

For period 6-5-45 to 9-5-45 (92 days)
Loan Balance \$100,000.00
Interest Rate 2% (Pace Act)
$\$100{,}000.00 \times \frac{92}{365} \times .02 = \$504.11$ (accumulated interest billed for quarterly period)

B. ACCUMULATED INTEREST WHEN ADVANCE IS MADE DURING PERIOD

For period 6-5-45 to 9-5-45 (92 days)
Loan Balance \$100,000.00
Advance of \$5,000.00 made August 8, 1945 (8-8-45 to 9-5-45 = 28 days)
Interest Rate 2% (Pace Act)
$\$100{,}000.00 \times \frac{92}{365} \times .02 = \$504.11$
$\$5{,}000.00 \times \frac{28}{365} \times .02 = \$\ 7.67$
\$504.11 plus \$7.67 = \$511.78 (accumulated interest billed for quarterly period)

Note: In the event a refund of overadvance has been made the computations are the same as above, but credit would be given rather than a charge.

CURRENT INTEREST PAYABLE: With constant loan balance and accumulated balance, interest is computed on the total of the unpaid loan balance plus the unpaid accumulated balance for the actual number of days in the quarterly period.

A. CURRENT INTEREST WITH CONSTANT LOAN BALANCE AND ACCUMULATED BALANCE

For period 6-5-45 to 9-5-45 (92 days)
Loan Balance \$10,000.00
Accumulated Balance \$4,500.00
Interest Rate 2%
$\$100{,}000.00 \text{ plus } \$4{,}500.00 \times \frac{92}{365} \times .02 = \$526.79$

B. CURRENT INTEREST WITH ADVANCE MADE DURING PERIOD

For period 6-5-45 to 9-5-45 (92 days)
Loan Balance \$100,000.00
Accumulated Balance \$4,500.00

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Advance made to system on July 20, 1945, for $500.00 (7-29-45 to 9-5-45 = 38 days)

Interest Rate 2%

$100,000.00 plus $4,500.00 x $\frac{92}{365}$ x .02 = $526.79

$500.00 x $\frac{38}{365}$ x .02 = $1.04

$526.79 plus $1.04 = $527.83 (current interest due and payable 9-5-45)

Note: In the event a repayment or refund of overadvance instead of advance of $500.00 had been made by the system, the computations would have been the same as above, but credit would be given for 38 days rather than a charge.

AMORTIZATION PAYMENTS: The basis for determining monthly payments at the beginning of the amortization period which usually begins the 49th month after the date of the note, is calculated upon the net total amount of advances (unpaid principal plus cushion of credit) plus the unpaid accumulated interest balance at the end of the 48th month. (Refer to the Mortgage Note for verification of amortization basis date and rate of payments.)

A. The amortization payments are calculated as follows:

At end of 48th month, total advances $100,000.00
(or unpaid principal of $90,000.00 plus cushion of credit $10,000.00)
At end of 48th month unpaid accumulated Interest Balance $4,065.00
Amortization schedule of $3.00, $4.00, $5.00 and $5.35 per $1,000.00
49th month to 60th month $100,000.00 + $4,065.00 x $3.00 = $312.20
61st month to 72nd month $100,000.00 + $4,065.00 x $4.00 = $416.26
73rd month to 84th month $100,000.00 + $4,065.00 x $5.00 = $520.33
85th month to 25 years $100,000.00 + $4,065.00 x $5.35 = $556.75
Note: The monthly schedule above is used for illustration only and does not apply to all notes.

B. The exception to Paragraphs A is for material sold and the proceeds returned to REA as a reduction of the long-term debt. These amounts are considered principal due and should not be included in calculations for amortization payments; therefore, all sales of material or property made prior to the 48th month would be deducted from the total sum of advances and the unpaid accumulated Interest Balance at the end of the 48th month.

C. Procedure of breakdown of amortization payments when rates change between billing dates:

Example: At the end of the 48th month the amortization payments were calculated on a loan balance of $100,000.00 plus an accumulated balance of $4,125.00. The rates were as follows:

From 7-25-44 to 6-25-45 @ \$3.00 per \$1,000 = \$312.38
From 7-25-45 to 6-25-46 @ \$4.00 per \$1,000 = \$416.50
From 7-25-46 to 6-25-47 @ \$5.00 per \$1,000 = \$520.63
From 7-25-47 to 6-25-65 @ \$5.50 per \$1,000 = \$572.69
For the period 5-5-45 to 8-5-45
From 5-5-45 to 6-25-45 = 51 days at \$3.00 rate
From 6-25-45 to 8-5-45 = 41 days at \$4.00 rate

$\$312.38 \times 3 \times \frac{51}{92} = \$519.50$

$\$416.50 \times 3 \times \frac{41}{92} = \$556.84$

\$519.50 plus \$556.84 = \$1,076.34 (total amortization payment for the period 5-5-45 to 8-5-45)

CURRENT INTEREST WHEN NOTE IS BEING AMORTIZED: Interest during the amortization period for regular quarterly billings is computed on the quarter basis of the annual rate, i.e., ($\frac{1}{4}$ x .02).

A. If loan balance remains the same for the period, interest is computed on the unpaid loan balance plus the unpaid accumulated balance for the quarterly period.

For the period 6-5-45 to 9-5-45 ($\frac{1}{4}$ of annual rate)
Loan Balance \$100,000.00
Accumulated Interest Balance \$5,000.00
Amortization Payment (monthly) \$315.00
Old Interest Rate 2.73%
New Interest Rate 2% (Pace Act)
\$100,000.00 plus \$5,000.00 x $\frac{1}{4}$ x .0273 = \$716.63 (Interest at old rate)
\$100,000.00 plus \$5,000.00 x $\frac{1}{4}$ x .02 = \$525.00 (Interest at new rate)
\$716.63 - \$525.00 = \$191.63 (interest saving)
\$315.00 x 3 - \$191.63 = \$753.37 (amortization payment quarterly minus interest saving in accordance with Pace Act determinations)
\$753.37 - \$525.00 = \$228.37 (Amount of accrued-deferred interest due or principal due when accrued-deferred interest is paid up.)

B. If loan balance remains the same and previous payment of accumulated interest was late, interest is computed on the unpaid loan balance plus the accumulated balance for the period. An additional charge to current interest is made on the delinquent accumulated interest at the $\frac{1}{4}$ rate for the actual number of days the payment is late. When payment for accumulated interest is received prior to due date, the same computations are used, but a credit to current interest is made on the payment at the $\frac{1}{4}$ rate for the actual number of days the payment is received prior to due date.

For period 6-5-45 to 9-5-45 ($\frac{1}{4}$ of rate)
Loan Balance $100,000.00
Accumulated Interest Balance $4,812.13
Amortization Payment (monthly) $315.00
Old Interest Rate 2.73%
New Interest Rate 2%
Remittance of accumulated interest of $187.87 due 3-5-45 and credited 3-9-45 (4 days)
$100,000.00 plus $4,812.13 x $\frac{1}{4}$ x .0273 = $715.34 (interest at old rate)
$100,000.00 plus $4,812.13 x $\frac{1}{4}$ x .02 = $524.06 (interest at new rate)
$715.34 - $524.06 = $191.28 (interest saving for quarterly period)
$187.87 x ($\frac{4}{92}$ of ($\frac{1}{4}$ x .02)) - $.04 (additional charge on interest)
$524.06 plus $.04 = $524.10 (current interest for quarterly period)
$315.00 x 3 - $191.28 = $753.72 (quarterly amortization payment minus interest saving)
$753.72 - $524.10 = $229.62 (accrued deferred interest due or principal due when accrued deferred interest is paid up)

C. When advance payment or sales of material are made during the period, interest is computed on the old loan balance through the date the remittance is credited and on the new loan balance thereafter through the end of the billing period.

For period 6-5-45 to 9-5-45
Loan Balance as of 6-5-45 $100,000.00
Accumulated Balance $4,500.00
Amortization Payment (monthly) $315.00
Old Interest Rate 2.73%
New Interest Rate 2%
Advance Payment of $500.00 made August 1, 1945
From 6-5-45 to 8-1-45 (inclusive) = 57 days
From 8-2 to 9-5-45 = 35 days
$100,000.00 plus $4,500.00 x ($\frac{57}{92}$ of ($\frac{1}{4}$ x .0273)) = $441.88 (interest before advance payment at old rate)
$100,000.00 plus $4,500.00 x ($\frac{57}{92}$ of ($\frac{1}{4}$ x .02)) = $323.72 (interest before advance payment at new rate)
$441.88 - $323.72 = $118.16 (interest saving before advance payment)
$99,500.00 plus $4,500.00 x ($\frac{35}{92}$ of ($\frac{1}{4}$ x .0273)) = $270.03 (interest after advance payment at old rate)
$99,500.00 plus $4,500.00 x ($\frac{35}{92}$ of ($\frac{1}{4}$ x .02)) = $197.83 (interest at new rate after advance payment)
$270.03 - $197.83 = $72.20 (interest saving after advance payment)
$197.83 plus $323.72 = $521.55 (current interest at new rate)
$118.16 plus $72.20 = $190.36 (total interest saving for quarterly period)
$315.00 x 3 - $190.36 = $754.64 (total quarterly payment due)
$754.64 - $521.55 = $233.09 (accrued deferred interest due or principal due when deferred interest is paid)

D. When remittance for principal billed is <u>received prior to due date</u>, credit on the payment is given on the next regular billing. This credit is <u>retroactive to April 1, 1945</u>, and refers to all borrowers that have remitted amounts before the actual due date.

For the period 6-5-45 to 9-5-45
Loan Balance as of 6-5-45 \$100,000.00
(Accumulated Balance has been paid in full)
Amortization Payment (monthly) \$315.00
Old Interest Rate 2.73%
New Interest Rate 2% (Pace Act)
Principal Payment \$250.45 due 6-5-45 credited by RFC 6-1-45
(6-1-45 to 6-5-45 = 4 days credit)

$\$100{,}000.00 \times \frac{1}{4} \times .0273 = \$682.50$ (interest for quarterly period at old rate)

$\$100{,}000.00 \times \frac{1}{4} \times .02 = \$500.00$ (interest for quarterly period at new rate)

$\$682.50 - \$500.00 = \$182.50$ (interest saving)

$\$250.45 \times \frac{4}{92}$ of $(\frac{1}{4} \times .02) = \$.05$ (credit on principal payment received prior to due date)

$\$500.00 - \$.05 = \$499.95$ (total current interest due for quarterly period)

$\$315.00 \times 3 - \$182.50 = \$762.50$ (total amortization payment due for quarterly period)

$\$762.50 - \$499.95 = \$262.55$ (principal due for quarterly period)

E. When remittances for principal billed are <u>received after the due date</u>, the next interest billing will be computed on the loan balance at last billing date up to and including the date of receipt of remittance plus interest on the new unpaid loan balance after the remittance is applied through the end of the billing period.

For period 6-5-45 to 9-5-45
Loan balance as of 6-5-45 \$100,000.00
(Accumulated Balance has been paid in full)
Amortization Payment (monthly) \$315.00
Old Interest Rate 2.73%
New Interest Rate 2% (Pace Act)
Remittance of \$187.87 for principal due 6-5-45 received June 21,1945
(From 6-5-45 to 6-21-45 (inclusive) 16 days. From 6-22-45 to 9-5-45 is 76 days)

$\$100{,}000.00 \times (\frac{16}{92}$ of $(\frac{1}{4} \times .0273)) = \$118.70$ (interest before principal payment is received--old rate)

$\$100{,}000.00 \times (\frac{16}{92}$ of $(\frac{1}{4} \times .02)) = \$86.96$ (interest before principal payment is received--new rate)

$\$118.70 - \$86.96 = \$31.74$ (interest saving before payment was received)

$\$99{,}812.13 \times (\frac{76}{92} \times (\frac{1}{4} \times .0273)) = \$562.75$ (interest after principal payment was received--using old rate)

$99,812.13 x $(\frac{76}{92} \times (\frac{1}{4} \times .02))$ = $412.27 (interest after principal payment was received--using new rate)

$562.75 - $412.27 = $150.48 (interest saving after payment was received)

$86.96 plus $412.27 = $499.23 (Total current interest due for quarterly period)

$150.48 plus $31.74 = $182.22 (Total interest saving for quarterly period)

$315.00 x 3 - $182.22 = $762.78 (Total payment due for quarterly period minus interest saving)

$762.78 - $499.23 = $263.55 (Principal due for quarterly period)

F. When borrowers continue to make monthly remittances and do not submit a letter showing distribution of payment, interest is computed on the loan balance plus accumulated interest balance from last billing date up to and including the date the remittance is credited by RFC. The amortization payment is figured for the number of days from the last billing date up to and including the remittance date. The monthly remittance is applied accordingly. <u>All amounts received from borrowers who are not on a quarterly basis should be billed.</u> This will be done through the medium of a "dummy" memorandum within REA and the borrower will be notified of the application of the remittance, (Form FI-236). The regular quarterly billings will reflect the difference between the amounts due quarterly and any monthly payments of interest and principal that might have been made by the borrower during the quarterly period.

During the period 6-5-45 to 9-5-45 the borrower remits $315.00 on July 13, 1945 (from 6-5-45 to 7-13-45 = 38 days)
Loan Balance as of 6-5-45 $100,000.00
(Accumulated Interest Balance has been paid in full)
Amortization Payment (monthly) $315.00
Old Interest Rate 2.73%
New Interest Rate 2%

$100,000.00 x $\frac{38}{92} \times (\frac{1}{4}$ of .0273) = $281.90 (interest for 38 days at old rate)

$100,000.00 x $\frac{38}{92} \times (\frac{1}{4}$ of .02) = $206.52 (interest for 38 days at new rate)

$281.90 - $206.52 = $75.38 (interest saving for 38 days)

$315.00 x 3 x $\frac{38}{92}$ - $75.38 = $314.95 (amortization payment required for 38 days)

$314.95 - $206.52 = $108.43 (principal billed for 38 days)

On the Collection Ticket, the amount of $315.00 would be applied as:

$206.52 Current Interest
$108.48 Principal (Overpayment of .05 applied to Principal)

G. When the borrower continues to make monthly payments and submits to REA a letter of transmittal showing their distribution of the monthly payment, the remittance will be applied to REA accounts on the same basis that the borrower states in his letter. The payments will be billed out as directed in Paragraph F, and Form FI-236 would be sent to the borrower. The regular quarterly billings will reflect the difference between the amounts due quarterly and any monthly payments of interest and principal that might have been made by the borrower during the quarterly period.

TEXT No. 21

SPECIMEN OF BILLING STATEMENT

DEPARTMENT OF AGRICULTURE
RURAL ELECTRIFICATION ADMINISTRATION
FORM F1-193 (11-7-40)

STATEMENT OF PRINCIPAL AND/OR INTEREST PAYABLE

REFERENCE			AMOUNTS PREVIOUSLY BILLED BUT NOT PAID		UNPAID LOAN BALANCE		MATURITIES SINCE LAST STATEMENT				DATE THIS STATEMENT DUE	TOTAL AMOUNT NOW DUE	
							ACCUM. INTEREST		CURRENT				
DATE	STATEMENT NO.		PRINCIPAL	INTEREST			CURRENT	BALANCE	INTEREST	PRINCIPAL		PRINCIPAL	INTEREST
1	2	3	4	5	6	7	8	9	10	11	12	13	14

STATEMENT NUMBER
15

16

17

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PAY TOTAL OF THESE COLUMNS